### **Final Announcement**



### The 3rd International Oyster Symposium (IOS3) -Recent Advances, Potentials, Challenges and Problems in Oyster

### 2<sup>nd</sup> ~4<sup>th</sup> November, 2009

### Taipei, Taiwan

### ORGANIZERS

The World Oyster Society Fisheries Research Institute, Council of Agriculture, Taiwan National Taiwan Ocean University, Taiwan Food & Fertilizer Technology Center for the Asian and Pacific Region, Taiwan

### **CO-SPONSORS**

Council of Agriculture, Taiwan National Science Council, Taiwan Environmental Protection Administration, Taiwan Fisheries Agency, Council of Agriculture, Taiwan Ministry of Education, Taiwan National Taiwan University, Taiwan National Penghu University Changhua Fishery Association, Taiwan Chiayi Fishery Association, Taiwan SHUI Marine Biotechnology Co., Taiwan

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Dr. Katsuyoshi Mori	President, The World Oyster Society		
	Professor Emeritus, Tohoku University, Japan		

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Dr. Ximing Guo	Professor, Haskin Shellfish Research Laboratory, Institute of Marine and Coastal Sciences, Rutgers University, USA			
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Dr. Wayne A. O'Connor	Senior Research Scientist, New South Wales Department of Primary Industries' Port Stephens Fisheries Institute, Australia		
Dr. David Raftos	Associate Professor, Department of Biological Sciences, Macquarie University, Australia		
Dr. René Robert	Head, The Molluscs Experimental Hatchery of Argenton (Britanny), IFREMER, France		
Dr. Wei-Cheng Su	Director , Fisheries Research Institute, Council of Agriculture, Taiwan		
Dr. Ketut Sugama	Directorate General of Aquaculture, Department of Marine Affairs and Fisheries of Indonesia, Indonesia		
Dr. Keisuke Takahashi	Associate Professor, Graduate School of Agricultural Science, Tohoku University, Japan		
Dr. Aswani K. Volety	Professor, Marine and Environmental Science, Florida Gulf Coast University, USA		
Dr. Mitsugu Watanabe	President, Watanabe Oyster Laboratory CO., LTD. Councilor, The Foundation of Oyster Research Institute, Japan		
Dr. Noel P. Wilkins	Professor, Department of Zoology, National University of Ireland, Galway, Ireland		
Dr. Xinzhong Wu	Professor, College of Animal Sciences, Zhejiang University, China		
Dr. Mamoru Yoshimizu	Professor, Graduate School of Fisheries Sciences, Hokkaido University, Japan		

# **Keynote Speakers**

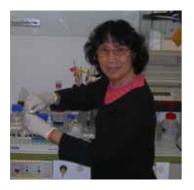


#### Dr. Kun-Hsiung Chang

President Society of Streams, R.O.C.

Dr. Chang is an adjunct professor of National Taiwan Ocean University and President of The Society of Streams, Taiwan (R.O.C.), His undergraduate studies were undertaken at National Taiwan University and he received his Ph.D. from University of Tokyo, Japan. Working on aspects of population dynamics of marine fishes and their sustainable development.

He has been professor of National Taiwan University, Professor and Dean of the National Chung-Shan University ' Director and Research Fellow, Institute of Zoology Academia Sinica Committee member of Fisheries Consultant Committee member, group of Natural and Cultural Landscape and Reviewer, Council of Agriculture. Taipei Consultant and chief of Scientific division, Taipei Economic and cultural, Representative office in Japan.



#### Dr. Fu-Lin E. Chu

Virginia Institute of Marine Science (VIMS) School of Marine Science College of William and Mary, USA

Oyster pathophysiology, host/parasite interactions, and plankton biochemistry

Professor Chu is an Emeritus Professor at the Virginia Institute of Marine Science (VIMS), College of William and Mary. Professor Chu received her B.S. from the Chinese University of Hong Kong, her M.S. from University of Rochester, New York and Ph.D. from the College of William and Mary. Professor Chu was a tenure full professor until she retired in December 2008. Her research interests focus on the topics of nutrition, physiology, host/parasite interactions and environmental stressors in shellfish such as oysters and fish, and very recently on phytoplankton biochemistry, essential nutrient upgrading and transfer, and biochemical processes affecting fishery production in marine coastal environments. Her work in "nutrition and oyster pathophysiology and diseases" is recognized nationally and internationally. Professor Chu has produced 74 peer-review papers and one U.S. patent. She has authored and co-authored 50 invited scholar presentations, including 4 plenary lectures

and 3 keynote speeches, and 86 contributed presentations in national and international conferences. She has been awarded the "Faculty Outstanding Research" at VIMS. Professor Chu has served as an excellent role model for women in science as well as minority women in science. She won the Dean's Prize for the "Advancement of Women in Marine Science" at her institute in 2008. Professor Chu is ad hoc reviewers of numerous international renowned journals and has conducted proposal reviews for government and private funding agencies in Australian, US, New Zealand, and Kuwait.



#### Dr. David Raftos

Macquarie University and the Sydney Institute of Marine Science, Sydney, Australia

Marine biology, proteomics and invertebrate immu- nology

David Raftos is an Associate Professor of Marine Science at Macquarie University. He has over 25 years

experience in marine biology, focusing on the cell and molecular biology of marine invertebrates. After completing his Ph.D., Associate Professor Raftos worked as a Fulbright Scholar at the University of California Los Angeles, and as an Australian Research Council Fellow at the University of Technology Sydney. He has since held faculty positions at the University of Technology Sydney and Macquarie University, and has also been a Visiting Professor at Cornell University in New York and the George Washington University in

Washington DC. Associate Professor Raftos is currently the Deputy Chair of the Department of Biological Sciences at Macquarie University and is Director of the University's Marine Science Program. He is also a senior member of the Sydney Institute of Marine Science and has served on the editorial boards of the Journal of Experimental Zoology and Developmental and Comparative Immunology. His current research focuses on the effects of environmental stress on marine invertebrates at the cellular and genetic levels, with particular emphasis on infectious disease and environmental contamination. His research projects, funded by the Australian Research Council and the Fisheries Research and Development Corporation, include the use of proteomics and transcriptomics to investigate the biological effects of environmental pollution and climate change on marine invertebrates, and molecular studies of disease resistance and susceptibility in oysters.

### Dr. Keisuke G. Takahashi



The Foundation of Oyster Research Institute; Graduate School of Agricultural Science, Tohoku University, Japan

Molluscan biology, physiology and Immunology

Dr. Takahashi is an Associate Professor at Laboratory of Aquacultural Biology, Graduate School of Agricultural Science, Tohoku University. He took office as Director General of the

Foundation of Oyster Research Institute in June 2009. He received his Ph.D. from Tohoku University, Sendai, working on functional profiles associated with the bio-defense mechanisms of the hemocytes in the Pacific oyster, *Crassostrea gigas*. He has 18 years experience in researches of the bio-defense and innate immunity of a number of molluscs, especially the Pacific oyster. Dr. Takahashi is an editor for the journals Aquaculture Research and Comparative Immunology. He is the author of 50 peer-reviewed publications (papers and book chapters) and over 70 other publications in conference proceedings, reports and magazines. He is a member of several international societies for molluscan biology, aquaculture and immunology and currently sits on a number of research and advisory committees for oysters in Japan.



### Dr. Aswani K. Volety

Department of Marine and Ecological Sciences, Florida Gulf Coast University, USA

Shellfish physiology, shellfish diseases, ecotoxicology, immunopathology, habitat restoration.

Aswani Volety is a Professor of Marine Science and the Chair of the Department of Marine and Ecological Sciences at Florida Gulf Coast University. His research expertise includes shellfish diseases, physiology, immunopathology, toxicology, and management and restoration of shellfish habitat. His current research includes investigating the effects of watershed alteration, freshwater inflows and contaminants on the biochemical, physiological, and ecological responses of oysters, community-based restoration of oyster reefs, impacts of red tides on shellfish and marine environmental education and outreach. He has organized many special sessions in national and international meetings, co-organized the 8<sup>th</sup> International Conference on Shellfish Restoration in Brest, France, and has served on several national and international panels including the Caloosahatchee Estuary Conceptual model for Comprehensive Everglades Restoration Plan. He is the author of nearly 50 peer-reviewed and technical publications and has over 150 conference presentations. He is the lead investigator for a National award winning project "Oyster reef restoration in Southwest Florida" that received the 2006 Coastal America Partnership Award for outstanding protection of coastal resources.

# Symposium program

# Monday, 2 November, 2009

### Venue: Socrates Chamber

08:30~09:00	Symposium Registration		
09:00~09:15	Opening Ceremony		
09:15~09:30	Group Photography		
09:30~10:00	Tea Break & poster viewing		
Chair: Dr. Aswa	Chair: Dr. Aswani K. Volety		
10:00~10:30	<b>Keynote Speech 1</b> Host-parasite interaction: the protozoan parasite <i>Perkinsus marinus</i> and its host the eastern oyster <i>Crassostrea virginica</i> by Dr. Fu-Lin E. Chu		
	Topic: Genetic improvements of oyster seeds and stocks		
10:30~10:50	Using DNA barcodes to assess oyster biodiversity of Taiwan by Sheng-Tai Hsiao		
10:50~11:10	Functional genetics and genomics studies in the Pacific oyster <i>Crassostrea gigas</i> : from individual to population approaches by Pierre Boudry		
11:10~12:00	Poster Session (Aristotle Chamber)		
12:00~14:00	Lunch		
Chair: Dr. Fu-Lin E. Chu			
14:00~14:30	Keynote Speech 2Use of oyster Crassostrea virginica responses in environmental monitoringand restoration to augment shellfish productionby Dr. Aswani K. Volety		
	Topic: Environmental quality monitoring and improvement in the		
	course of oyster production		

14:30~14:50	Effects of dioxins on the residues in oyster and white shrimp	
by Fan-Hua Nan		
	Topic: Natural collection and artificial production	
14:50~15:10	Production of oyster spat in Taiwan	
	by Koa-Jen Jong	
15:10~15:30	Tea Break & poster viewing	
	Topic: Natural collection and artificial production	
15:30~15:50	The pioneering oyster hatcheries established in Taiwan	
	by Yuh-Siun Jiang	
15:50~16:10	Temporal and spatial distribution of oyster eyed larvae in Yun-Lin coastal	
	waters of Taiwan	
	by Yin Chang	

# Tuesday, 3 November, 2009

### Venue: Socrates Chamber

Chair: Dr. Keisuke G. Takahashi		
09:00~09:30	Keynote Speech 3	
	QX disease and the Sydney rock oyster immune system	
	by Dr. David A. Raftos	
	Topic: Management of the oyster aquaculture	
09:30~09:50	The oyster culture in Ukraine	
	by Oksana Vyalova	
09:50~10:10	Remote setting oyster larvae facilities in Canada, Malaysia, Thailand, and	
	Vietnam	
	by Lawrence (Larry) Kitt	
10: 10~10: 30	Tea Break & poster viewing	
Chair: Dr. David A. Raftos		
10:30~11:00	Keynote Speech 4	
	Hemocytes of the Pacific oyster: origin, morphology, functions in	
	bio-defense, and death	
	by Dr. Keisuke G. Takahashi	

	Topic: Management of the oyster aquaculture (FFTC)
11:00~11:20	The status of recent advances, potentials, challenges and problems in
	Korean oyster industry
	by Young Baek Hur
11:20~11:40	Oyster culture in Vietnam: current status and management orientations for
	the future
	by Phung Bay
11:40~12:00	Oyster industry in the Philippines
	by Westly R. Rosario
12:00~14:00	Lunch
Chair: Dr. Chi-Lu	ı Sun
14:00~14:30	Keynote Speech 5
	Oyster culture in Penghu, Taiwan
	by Dr. Kun-Hsiung Chang
	Topic: Oyster's contribution to human health
14:30~14:50	Beneficial effect of oyster extract-containing diet in patients with recurrent
	aphthous stomatitis
	by Mitsugu Watanabe
14:50~15:10	Survival of norovirus (NoV) and FCV in marine environments and
	predictions for elimination of NoV infectivity
	by Hisae Kasai
15:10~15:30	Tea Break & poster viewing
	Topic: Civilization of oyster industry
15:30~15:50	An investigation on the cultural and leisure value of the rock-based oyster
	farming in Kinmen
	by Yi-Chia Chen
15:50~16:10	The research of oyster field cultural landscape and industry developments
	in Wang-Kung

# 2<sup>nd</sup>~3<sup>rd</sup> November, 2009

### Venue: Aristotle Chamber

P-1	Oyster ( <i>Crassostrea angulata</i> ) hydrolysates exhibit potential antioxidant, immunomodulatory, and anti-fatigue activities	Huey-Jine Chai
P-2	Fouling animals on surface of cultured oysters <i>Crassostrea</i> gigas in Tongshih lagoon of Chiayi, Taiwan	Jiun-Li Chang
P-3	The development of using hydro-acoustic technique to measure oyster larvae swimming ability	Yin Chang
P-4	The establishment on the model plant of reuse waste oyster shell	Chi-Chung Fan
P-5	Physiological and tissue response to heavy metal in oyster	Wei-Hong Gao
P-6	The spatiotemporal pattern of oyster larvae abundance in Cigu lagoon, Taiwan	Hung-Yen Hsieh
P-7	The application of burned oyster shell used in anti-bacterial	Pai-An Hwang
P-8	A new distribution record for Kumamoto oyster <i>Crassostrea</i> sikamea in Nakaumi lagoon,Japan	Yusuke Iidzuka
P-9	A biallelic microsatellite DNA analysis for hybrid oysters between <i>Crassostrea gigas</i> and <i>C. angulata</i>	Takeshi Iwasaki
P-10	Growth, reproductive biology reproductive of oyster in Chang-Hua, Taiwan	Yen-Cheng Lo
P-11	Thermal and water color effects on Taiwan oyster productions	Sha Miao
P-12	Oysters and climate change: impacts and adaptation	W. A. O'Connor
P-13	Quality improvement of shucked oyster with brine-dipping and ozone cleaning	Chyuan-Yuan Shiau
P-14	The growth and survival of cultchless oyster reared in the coastal and pond	Ren-Shyang Tai
P-15	The larval densities and optimal setting period in the production of artificial oyster cultch	Ren-Shyang Tai
P-16	The heavy metal content in culture oysters <i>Crassostrea</i> <i>angulata</i> along the seashore on the Chang-Hua county of Taiwan in recent 4 years	Rong-Jeng Tseng

# gis NTU convention center map

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NTU Map 國立台灣大學校總區地圖全圖





# Taipei Metro route map